

## ORDINANCE \_\_\_\_\_

AN ORDINANCE OF THE MAYOR AND COUNCIL OF THE CITY OF MESA, MARICOPA COUNTY, ARIZONA, AMENDING MESA CITY CODE TITLE 9, CHAPTER 6 “SUBDIVISION REGULATIONS” TO ALLOW REDUCED STREET LIGHTING IN CERTAIN AREAS OF THE CITY OF MESA.

WHEREAS, Title 9, Chapter 6 of the Mesa City Code entitled “Subdivision Regulations” governs street lighting in the City, including the Desert Uplands Area.

WHEREAS, City streetlights have historically been High Pressure Sodium (HPS) lighting; however, lighting technology has advanced in recent years, specifically from HPS to Light Emitting Diode (LED). As LED lighting has continued to become more energy efficient and cost effective, lighting manufacturers have transitioned from making HPS fixtures to making LED fixtures. HPS fixtures that meet the City’s current performance requirements are no longer available in certain fixtures styles and the City anticipates this trend will continue.

WHEREAS, generally, while HPS lighting is a narrow spectrum of light that appear as a dull yellow glow and LED street lighting generates a more natural white light and is more energy efficient, the LED street lights may be perceived as creating greater light pollution and unwanted light intrusion into adjacent residential areas and such light pollution has generated public interest in reducing lighting levels in certain areas of the City.

WHEREAS, other municipalities in Arizona have what is commonly referred to as Dark Sky Ordinances, including Sedona, Scottsdale, and Tucson, that allow for reduced street lighting levels to reduce light pollution and reduce unwanted light intrusion into adjacent residential areas.

WHEREAS, the City Council finds and determines that it is appropriate to allow a pilot study for certain areas of the City to have reduced lighting levels similar to the dark sky lighting levels of Sedona, Scottsdale, and Tucson.

WHEREAS, the City Council finds and determines that the amendment to Title 9, Chapter 6 of the Mesa City Code set forth in this Ordinance creates minimum lighting levels in the pilot areas, and in the City, that safely and adequately protect the citizens of Mesa and the traveling public while allowing the City the opportunity to implement pilot studies to determine the lighting level that best meets the needs of the City and its citizens.

**NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MESA, MARICOPA COUNTY, ARIZONA, AS FOLLOWS:**

**SECTION 1.** Mesa City Code 9-6-1(C) is amended to add the following definitions, which shall be codified in Section 9-6-1(C) by inserting the defined terms into the code based on the alphabetical order of the defined terms:

**DESERT UPLANDS AREA:** The area of Mesa, Arizona that is bounded by the Central Arizona Project Canal on the west, Meridian Road and Utery Mountain Regional Park on the east, University Drive on the south, and the Tonto National Forest boundary on the north and as depicted in Figure 36.

**ELECTRIC SERVICE AREA:** The area of Mesa, Arizona that receives electric utility service from the City of Mesa, commonly referred to as the City of Mesa Electric Service Area.

**FULL CUTOFF STREETLIGHT FIXTURE:** Streetlight fixtures, with either a HPS or LED light source, where no light is emitted by the fixture above an angle of 90 degrees above nadir (no light emitted above the horizontal).

**HPS:** High Pressure Sodium.

**LED:** Light Emitting Diode.

**MAXIMUM PILOT LUMEN LEVEL:** The illumination level required by Roadway Lighting ANSI/IES RP-8.

**MINIMUM PILOT LUMEN LEVEL:** A level not less than fifty (50) percent of the illumination levels required by Roadway Lighting ANSI/IES RP-8.

**PILOT STUDY AREAS:** The Desert Uplands Area and the Electric Service Area.

**PILOT STUDY PERIOD:** from June 1, 2017 to December 31, 2019.

**STREETLIGHT LUMEN LEVEL:** Standard lumen lighting levels of a streetlight required by Roadway Lighting ANSI/IES RP-8.

**SECTION 2.** Mesa City Code 9-6-4(D)(10) is deleted in its entirety and replaced with the following:

10. Streetlights. Streetlights shall be installed along all streets within the subdivision and along all perimeter streets developed in conjunction with the subdivision. Streetlights shall be LED or HPS and shall be installed by the subdivider in accordance with plans approved by the City and in conformance with City standards. Street light illumination levels shall comply with the Streetlight Lumen Level and City Engineering standards. LED lights shall have a color temperature/kelvin rating as approved by the Transportation Department Director. For a single parcel development with less than one hundred fifty feet (150') of street frontage, the City Engineer may waive the required streetlight installation. If installation is waived, prior to the issuance of a building permit, the subdivider shall pay an amount determined by the City based on the street frontage to pay for the future installation of streetlights by the City or others.
  - (a) Pilot Program. During the Pilot Study Period and within the Pilot Study Areas, the City's Transportation Department Director, or his designee, may reduce and vary the streetlighting lumen levels (including from week-to-week, day-to-day, or within a single night or with the use of a time-of-night dimming schedule) so long as the lumen level is not lower than the Minimum Pilot Lumen Level or greater than the Maximum Pilot Lumen Level.
    - i. Within ninety days after the Pilot Study Period, the illumination levels that were reduced under the Pilot Study shall be brought into conformance with the Streetlight Lumen Level.
    - ii. The Pilot Program shall not apply to new streetlights installed in connection with City capital improvement projects or non-City projects except as may be approved by the Transportation Department Director with a dimming system that complies with the Pilot Program requirements in Subsection 9-6-4(D)(10)(a).

**SECTION 3.** Mesa City Code 9-6-5(A) is amended as follows (added text appears in **BOLD AND ALL CAPS**, deleted text appears as a ~~strike through~~):

- (A) Purpose and Intent. The purpose of these standards is to minimize hillside disturbance and encourage preservation of the natural character and aesthetic value of the desert within the Desert Uplands Area by allowing the flexibility necessary to produce unique, environmentally sensitive projects. It is the intent of these standards to encourage development of subdivisions with a distinctive southwest desert design theme. **THE REQUIREMENTS OF THIS SECTION 9-6-5 APPLY ONLY TO THE DESERT UPLANDS AREA.**

All present City design standards may not be applicable to desert preservation-oriented development. Due to the anticipated vehicular and pedestrian volumes normally associated with higher residential densities, developments within the R1-15 zone and higher-density residential and nonresidential uses shall generally comply with present City of Mesa ordinance requirements. Standard City requirements for subdivision design, stormwater retention, right-of-way, pavement width, and street design shall apply except in the following areas where alternatives may be permitted to maintain the natural desert character of the area.)

~~The Desert Uplands Area is that area of Mesa bounded by the Central Arizona Project (CAP) Canal on the west, Meridian Road and Utey Mountain Regional Park on the east, University Drive on the south, and the Tonto National Forest boundary on the north and as depicted in Figure 36.~~

1. PADs and nonresidential developments will be reviewed at the time of zoning approval or building permit application review for compliance with applicable Desert Uplands Standards and for a southwestern design theme.
2. In lower-density residential areas (R1-35 and lower), development standards similar to those for suburban areas may be approved.
3. Prior to any development, a Grading Permit shall be obtained in accordance with the Mesa City Code.

**SECTION 4.** Mesa City Code 9-6-5(B)(1) is amended as follows (added text appears in **BOLD AND ALL CAPS**, deleted text appears as a ~~strike through~~):

1. Local Residential Streets - Public.

The chart below specifies the local residential public street standards for each residential zoning district.

9-6-5(B)		LOCAL RESIDENTIAL STREETS - PUBLIC						
DIST.	LOT SIZE, SF	R.O.W.	CL TO BC	PARKING	CURB	SIDEWALK	WATER MAIN	STREETLIGHT**
R1-6 to R1-9	6,000+ to 9,000+	53'	17.5'	Both Sides	2' Roll	5' Width, Detached 5'*	1' Behind Curb	4' Behind Curb
R1-15	15,000+	47'	14.5'	One Side Only	2' Roll	5' Width, Detached 5'*	1' Behind Curb	4' Behind Curb

R1-35	35,000+	43'	12.5'	None	2' Roll	5' Width, Attached	1' Behind Curb	6' Behind Curb
R1-43 to R1-90	43,560+	30'	12.0'	None	3' Ribbon	None	1' Behind Curb	None

\*Landscaping shall consist of trees with limited canopies and shrubs selected from the Preferred Desert Uplands Plant List in accordance with Subsection (G)3 of this Section. Fifty percent (50%) of the trees are to be twenty-four-inch (24") box (new or salvage), within the five-foot (5') landscape strip between the curb and sidewalk. ~~Street lighting for the area north of McDowell Road, east of Hawes Road, and west of Usery Mountain Regional Park shall be in accordance with Subsection (D)6 of this section.~~

~~Streetlighting for the area north of McLellan Road, west of Ellsworth Road/92nd Street Alignment, south of McKellips Road and east of a north/south line one quarter mile west of Hawes Road, and the area north of McKellips Road, west of Ellsworth Road/92nd Street Alignment, south of Hermosa Vista Drive, and east of Hawes Road, shall be in accordance with Subsection (D)7 of this Section.~~

**\*\* CERTAIN STREETS MAY HAVE A REDUCED OR NO STREETLIGHTING REQUIREMENT PURSUANT TO 9-6-5(D).**

Homeowners' associations shall be responsible for maintenance of landscaping between the curb and sidewalk. To avoid damage to landscaping, the covenants, conditions, and restrictions are to require garbage/recycling barrels to be placed in the street adjacent to the curb, not in the landscaped area.

**SECTION 5.** Mesa City Code 9-6-5(D) is deleted in its entirety and replaced with the following:

**(D) Streetlights.**

1. Full cutoff streetlight fixtures shall be required in the Desert Uplands Area. Fixtures may be HPS or LED.
2. Streetlights on major streets and collector streets shall comply with City standard illumination and spacing requirements except as specified in Subsections (D)(3), (D)(6), and (D)(7) of this Section and Section 9-6-4(D)(10). Streetlights shall not be installed in medians except as may be approved by the Transportation Department Director after considering potential light pollution impacts on adjacent residential property. Mounting height shall be thirty-five feet (35') to forty feet (40').
3. On collector streets as permitted under Subsection (C) of this Section, street lighting shall use poles with a thirty-foot (30') or thirty-five foot (35') maximum mounting height and an average 0.37 footcandle light level with a six-to-one (6:1) average-to-minimum ratio. Lighting along the forty-six-foot- (46') wide sections of these streets adjacent to school sites, parks, or activity centers shall comply with City standard illumination and spacing requirements for collector streets.
4. Streetlights on local streets shall be placed at all intersections and at the end of cul-de-sacs that are more than two hundred feet (200') long except as specified in Subsection (D)(6) and Subsection (D)(7). On straight sections of roadway, spacing between streetlights may not exceed four hundred-foot (400'). However, other factors must also be evaluated; e.g., horizontal and vertical alignment. Topographical conditions may require additional lighting. Mounting height on local streets shall be twenty-five feet (25') with a fixture that emits between 2,900 and 4,000 lumens.
5. Pull box spacing for streetlighting shall not exceed two hundred feet (200').

6. For the area north of McDowell Road and east of Hawes Road and west of Usery Mountain Regional Park along public streets (inclusive of McDowell Road and Hawes Road, but exclusive of Ellsworth Road), no lighting on the public street shall be required. The developer shall provide an area light with a light pole no less than eight (8) feet in height and no greater than sixteen (16) feet in height with a fixture that emits between 2,900 and 4,000 lumens. The type of area light fixture and pole shall meet all applicable City standards. The area light fixture and pole shall be installed at each entrance to a multi-unit subdivision. The area light fixture and pole shall be owned, operated and maintained by the owners of the property, where the area light is installed; the City shall not be deemed to own, operate, maintain, or otherwise be responsible for such area light fixtures and poles. The area light fixture and pole shall be installed outside of the City right-of-way or public utilities and facilities easement and shall be installed adjacent to the edge of the driveway approach.
7. Streetlighting on public collector and local streets located in the area north of McLellan Road, west of Ellsworth Road/92<sup>nd</sup> Street alignment, south of McKellips Road and east of a north/south line one-quarter mile west of Hawes Road, and for the area north of McKellips Road, west of Ellsworth Road/92<sup>nd</sup> Street alignment, south of Hermosa Vista Drive, and east of Hawes Road, shall be provided at locations specified below to the light level required by City standards as set forth in 9-6-4(D)10 and City of Mesa Engineering and Design Standards:
  - (a) At all public street intersections and all locations where private driveways intersect a public street.
  - (b) At all marked and unmarked pedestrian crosswalks.
  - (c) At all pedestrian crossing points adjacent to parks or other activity centers.
  - (d) At all pedestrian, bike, equestrian, or joint use pathway crossings where pathway lighting is provided.
  - (e) At locations adjacent to parks or other outdoor activity centers continuous streetlighting shall be provided where such locations provide lighting for nighttime use and there is no fence or other physical barrier between the street and the park or outdoor facility that limits pedestrian access to specific crossing points.
  - (f) At the end of a cul-de-sac.
8. Streetlighting in the Desert Uplands Area is subject to the requirements, provisions, and modifications in Subsection 9-6-4(D)(10), except as specified in Subsections (D)(3), (D)(4), (D)(6), and (D)(7) of this Section, and is subject to the Pilot Program in Subsection 9-6-4(D)(10)(a).

**SECTION 6:** RECITALS. The recitals above are fully incorporated in this Ordinance by reference.

**SECTION 7:** EFFECTIVE DATE. The effective date of this Ordinance shall be thirty (30) days following adoption by the Mesa City Council.

**SECTION 8:** APPLICABILITY. The prohibition on streetlights in medians in Section 9-6-5(D)(2), as amended in this Ordinance, shall not apply to projects that have permits for streetlights in medians that are approved prior to the effective date of this Ordinance.

SECTION 9: PRESERVATION OF RIGHTS AND DUTIES. This Ordinance does not affect the rights and duties that matured, penalties that were incurred, or proceedings that were begun before the effective date of this Ordinance.

SECTION 10: SEVERABILITY. If any section, subsection, sentence, clause, phrase, or portion of this Ordinance or any part of the material adopted herein by reference is for any reason held to be invalid or unconstitutional by the decision of a court of competent jurisdiction, such decision shall not affect the validity of the remaining portions thereof.

PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF MESA, MARICOPA COUNTY, ARIZONA, this 8th day of May, 2017.

APPROVED:

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Mayor

ATTEST:

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City Clerk